## UNITED STAKES ORD'S OFFICE OF SCIENCE POLICY QUARTERLY

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A Letter from the Director, Office of Science Policy

I want to take this opportunity to thank everyone in OSP for their continued outstanding work and leadership over the past several months. We can point with pride to the work we have accomplished in planning, program support, and crossprogram activities. There is no doubt that OSP is considered a major contributor to ORD and the Agency's Science Advisor, and EPA's Program and Regional Offices. OSP took such a strong leadership role at the

**Letter** continued on p. 2

#### **EPA Science Forum 2003**

EPA Science Forum 2003: Partnering to Protect Human Health and the Environment will be held May 5-7, in the Ronald Reagan Building and International Trade Center, in Washington, DC. The Forum is being co-led by ORD, OW, OSWER, and Region 4, with each organization taking the lead for developing one of the following four themes:

- Year of Water: 30 Years of Progress Through Partnerships (OW)
- Homeland Security (OSWER)
- Moving Science Into Action (Region 4)
- Emerging Technologies (ORD)

We need your active participation in developing sessions and posters under these themes and look forward to your involvement in this EPA-wide event. For more on the Forum, see the EPA-wide Mass Mailer dated January 8, 2003, and check the Forum Web Site for updates at: http://www.epa.gov/ord/scienceforum.

### **Progress Reviews**

As part of ORD's annual planning process, OSP's media Research Coordination Teams (RCTs) organize and conduct progress review meetings. The purpose of these meetings is to discuss ORD research progress made in the past year, describe the current research program activities, and outline the upcoming fiscal year research and technical support plans. ORD scientists, and key Program Office and Regional staff participate in these discussions, work to develop a list of Scientist-to-Scientist Meeting topics each RCT wants to sponsor, identify and discuss projected Program Office and Regional policy trends, and identify the highest priorities for redirection or initiatives for that planning year.

During the month of December, the Waste RCT conducted its progress review for RCRA (Office of Solid Waste [OSW]) and Underground Storage Tanks (LUST Program), and Superfund (Office of Emergency and Remedial Response [OERR]) and Oil Spills. In addition to the general discussion topics outlined above, specific issues were covered such as the OSWER initiatives, multimedia modeling, vapor intrusion, bioreactors, phyto-capping, leaching, combustion, and provisional toxicity values, as well as an update on mining

activities. The OERR/Oil Spill covered contaminated sediments, groundwater remediation, analytical tools for Regional waste issues, SITE, the exposure factors program, dermal activities, and oil spill research, as well as an update on Integrated Risk Information System (IRIS) activities.

February 2003

For more information on this Progress Review, please contact Randy Wentzel at 202-564-3214 or wentzel.randy@epa.gov.

Also during December, the Water RCT conducted a Water Quality progress review. Specific topics included Goal 2 water quality and related research in Ecosystems Protection. The Office of Water reaffirmed its existing priority research areas: water quality criteria, critical areas (e.g., coral reefs, wetlands), monitoring and assessment, total maximum daily load (TMDL) support, and watershed management. Emerging needs identified were invasive species, ecosystem response thresholds, measuring attainment of criteria, ecological risk assessment, pharmaceuticals and personal care products, and genomics. The Drinking Water progress review was held January 28, 2003, in RTP.

For information on Progress Reviews, please contact Molly Whitworth at 202-564-4086 or whitworth.molly@epa.gov.

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### **Scientist-to-Scientist Meetings**

Each year, Research Coordination Teams (RCTs) conduct scientist-to-scientist meetings to bring together ORD, Program Office, and Regional scientists to discuss critical science topics. These meetings allow for the direct exchange of information between researchers and EPA scientists writing regulations and implementing the Agency's agenda. OSP staff play an important role in coordinating these meetings and ensuring their success. Two examples of scientist-to-scientist meetings held during the last quarter are described below.

Physiologically-Based Pharmacokinetic (PBPK) Approaches Meeting—On November 6-7, 2002, the Pesticides and Toxics RCT sponsored a scientist-to-scientist meeting on "Physiologically-Based Pharmacokinetic (PBPK) Approaches to Human Health Risk Assessment." This meeting explored the feasibility and appropriate uses of PBPK model outputs and other pharmacokinetic data in EPA human health risk assessments. The meeting agenda, presentations, session meeting summaries, and lists of pre-

senters and attendees can be accessed on the intranet at: http://intranet.ord.epa.gov: 9876/development/RCT/PestToxRCT.nsf.

For information on the scientist-to-scientist meetings, please contact Greg Susanke at 202-564-9945 or susanke. greg@epa.gov.

Polychlorinated Biphenyls (PCB) Congeners Meeting—On December 4-5, 2002, the Waste RCT sponsored a scientist-to-scientist meeting on "Methods for Characterizing and Utilizing PCB Congeners in Risk Assessment and Risk Management" in Chicago, IL. The meeting outlined the present status of PCB policy and regulations, detailed upcoming guidance, and characterized external Agency activities on PCB congeners. Additional information can be found on the intranet at: http://intranet.ord.epa.gov: 9876/development/RCT/WasteRCT.nsf.

For more information on the scientist-toscientist meetings, please contact Lorelei Kowalski at 202-564-3408 or kowalski.lorelei @epa.gov.

#### **Letter** (Continued from p. 1)

Baltimore "Leadership at All Levels" meeting, that I received many compliments about our staff from others in ORD. Keep up the good work!

And finally, I wish to thank all of you for your continued support over the past months while I was serving as Acting Office Director. As I stated at our recent All Hands, I believe my selection as OSP's Director was really a recognition of all that we have accomplished together.

Director
Office of Science Policy

### **Updating the EPA Strategic Plan**

Over the past several months, OSP was actively engaged in the process of updating the EPA Strategic Plan, which included revising the Government Performance and Results Act (GPRA) goal structure, reducing the number of goals from ten to five. The new Agency goals are: (1) Clean Air; (2) Clean and Safe Water; (3) Preserve and Restore the Land; (4) Healthy People, Communities, and Ecosystems; and (5) Compliance, Prevention, and Stewardship.

OSP Media Managers worked with members of Program Offices, the Office of Resources Management and Administration (ORMA) and other ORD representatives, and EPA senior managers to create a research/sci-

ence objective within each goal. This is where ORD work will be placed along with significant science activities across the Agency. In addition, an OSP writing team drafted the section on the cross-cutting science strategy for the Agency, which describes the EPA's approach to science, focusing on how the Agency sets its priorities and ensures the highest levels of quality.

In December 2002, the Agency released the new goal language to the public for comment. The entire EPA Strategic Plan, of which the new goal structure is a part, is due to be released to the Office of Management and Budget in March, followed by final release in September 2003.

# Solution to the Word Scramble Puzzle from the October Quarterly

1. regulations

9. technology

2. forum

10. policy

3. planning

11. endocrine

4. Teichman

12. tribes

5. region

13. particulates

6. summit

14. seminar

14. Seminar

7. remediation

15. guidelines

8. environmental

16. administrator

OSP communication is needed to convey OSP's message to its customers.

## REGIONAL CORNER

### **ORD-Regional Cumulative Risk Assessment Workshop**

The ORD-Regional Cumulative Risk Assessment Workshop was held November 4-8, 2002, at the EPA Region 6 office in Dallas, TX. The workshop was chaired by Michael Callahan, Region 6 RSL to ORD, with support from OSP.

The workshop included five sessions: (1) Introduction and Overview; (2) Planing, Scoping, and Community Issues; (3) Approaches to Cumulative Risk Assessment; (4) Putting the Pieces Together; and (5) Policy Implications. There were 70+ participants from EPA's Program and Regional Offices and Laboratories; other federal laboratories; state environmental agencies; and tribal organizations. Integrated into the agenda was the Cumulative Risk Tools Training Course, which provided instruction on a tool developed in Region 6 to address cumulative risk assessment issues.

Workshop speakers presented methods, current research, and case studies dealing with cumulative risk assessment. Breakout sessions focused on stakeholder involvement, development of research recommendations, and lessons learned from case studies. A policy panel addressed the potential effects of cumulative risk assessment on EPA regulatory functions and science activities. Planned outcomes from the workshop include identification of research needs, strengthening and improvement of communication networks, and better understanding of how cumulative risk assessment is being addressed across EPA.

The ORD/Regional Cumulative Risk Assessment Workshop was the eleventh in a series of Regional Science Topic Workshops sponsored by OSP. Each year, EPA Regional Offices identify and select priority science

topics on which to conduct workshops. Each workshop is planned and conducted by a team of Regional, ORD, and Program Office scientists. The objectives of the workshops are to establish a better cross-Agency understanding of the science applicable to the selected topics and develop a network of EPA scientists who continue to exchange information relevant to these topics as the Agency moves forward in planning, education, research, and risk management programs. For more information on this workshop or the workshop series, visit the OSP Web Site at http://www.epa.gov/osp or contact either Tom Baugh, Region 4 RSL to ORD, at 404-562-8275 or baugh.thomas@epa.gov; or David Klauder, Team Leader, ORD Regional Science Program, at 202-564-6496 or klauder.david@epa.gov.

## Regional Science Liaison Training Workshop—Research Triangle Park

The Regional Science Liaisons (RSLs) survived the RTP ice storm of 2002! Their week-long training workshop to learn about major ORD research programs ongoing at the EPA Labs and Center in RTP, was held December 3-6, 2002, at the new campus. In the middle of their week-long workshop, an ice storm snuffed out power to more than a million people in the RTP area, including the RSLs. About half of the group decided to stand-by at the airport for flights west, while the others journeyed by van a couple of hours

south to another hotel with heat and lights.

Once settled, small groups of RSLs gathered to continue ORD Regional Science program discussions on the implementation of several of the action items from the Atlanta Regional/ORD Science Summit. These discussions focused on approaches to communicating science to environmental decision-makers in the Regions, states, and tribes; strategies for initiating Region-sponsored announcements of ORD science relevant to local environmental

problems; and the development of Agency options for addressing priority Regional non-Superfund technical support needs. Specific RSL follow-up actions were identified to achieve these objectives.

The RSLs extend a special thanks to Debbie Janes and the many ORD research scientists and managers who participated in the planning and conduct of the workshop. For more information on this workshop, contact David Klauder at 202-564-6496 or klauder.david@epa.gov.

### **Hazardous Substance Technical Liaisons Report**

A number of the Hazardous Substance Technical Liaisons (HSTLs) assisted in setting up remote presentations for a number of meetings in their Regional Offices this past quarter, including the ORD PCB Congener Scientist-

to-Scientist Meeting (December 3-5) and the Technology Innovation Office's In-Situ Treatment Technologies Seminar (December 10-12). This allowed a number of Regional folks to attend without the burden of traveling. The average participation was 250 people per day via remote access, and about 25% of these participants were from the Regional Offices.

**HSTL** continued on p. 4



## REGIONAL CORNER

#### **HSTL** (Continued from p. 3)

Five HSTLs attended the Fall 2002 Superfund Tech Support Project/Forum Meeting in Pensacola, FL, which was held the week of November 17th. Those attending included Norm Kulujian, Felicia Barnett, Bob Mournighan, Jim Dunn, and Mike Gill. Felicia was particularly instrumental in that she provided coordination between the Forum's organizing committee and the ORD Gulf Breeze Laboratory, which hosted a tour of their facilities for the meeting attendees. As part of the Engineering Forum, a talk was given on the progress of the Energy Conservation/ Production Issue Paper, co-authored by Mike Gill. The issue paper proposes a process to save energy costs at Superfund sites. The draft is complete and is under review by some members of the Forum.

Many HSTLs, through their Regional Science Councils, are helping to follow up with action items resulting from the ORD/Regional Summit, which was held in Atlanta in late September. The Summit was attended by the Deputy Regional Administrators and ORD Assistant Administrator Paul Gilman. As a result of that meeting, Dr. Gilman has shown an interest in pursuing funding for HSTLs for Regions 5 and 6, and he is looking into closer ORD coordination with the Regional Labs. He has doubled this year's Regional Applied Research Effort (RARE) funding to the Regions (to \$200K/Region). In addition, the HSTLs are participating in an effort to characterize high-priority technical support needs from Regional programs outside Superfund and RCRA and to develop options for Agency responses to these needs.

Some individual HSTL activities of this past quarter are highlighted below.

Region 1—Steve Mangion attended a National Ground Water Association Conference on Fractured Rock and Remediation in November. He compiled a number of take-home messages covering characterization and remediation issues as well as matrix diffusion in granite, and forwarded the summary to his Region 1 customers and the HSTLs.

Region 2—Jon Josephs learned that the Superfund Innovative Technology Evaluation (SITE) Program selected a proposal from the University of Michigan and its industrial partners to demonstrate a hydrogen enhanced bioremediation process at Pearl Harbor to treat sediments contaminated by PCBs and dioxins. This innovative treatment process was initially developed with funding from Region 2. Jon has been assisting the University in its dioxin biotransformation research for more than 10 years.

Region 3—Norm Kulujian has been busy assisting Region 3 with emerging Homeland Security issues.

Region 4—Felicia Barnett is a member of a number of national workgroups, including the ORD Brownfields Workgroup, the Department of Energy (DOE) Oak Ridge Site Technology Coordination Group, and the Presumptive Remedies (PR) Work Group. The Brownfields Workgroup sponsored a workshop and participated in the Brownfields Conference held in Charlotte, NC, in November. The Oak Ridge group evaluates the different remediation technologies that are being used or considered for use to remediate the individual contaminated areas at the Oak Ridge Federal Facility.

**<u>Region 7</u>**—Bob Mournighan continues to provide support to the Region on Formerly Used Defense Sites (FUDS) issues, particularly those that concern perchlorate or radiation contamination.

**Region 8**—Jim Dunn contributed to the recent Waste Progress Review in early December in Washington, DC. He provided an overview of mine waste technology research and also provided an overview of the HSTL Program to OSWER management and staff.

**Region 9**—Mike Gill hosted two Korean visitors to Region 9 for 3 days in early October. They received a half-day of presentations covering Superfund and RCRA overviews, landfills, mines, methyl tertiarybutyl ether (MTBE), and other general Underground Storage Tank (UST) issues. The visitors were given site tours of two operating landfills (Ox Mountain Municipal Landfill in Half Moon Bay, CA; and Kettleman Hills Hazardous Waste Landfill in Kettleman City, CA) and two MTBE sites (the Navy's National Test Site for MTBE research in Pt. Hueneme, CA; and the City of Santa Monica's MTBE treatment plant).

Region 10—John Barich provided support to a Vadose Zone Conference that was conducted with DOE during this quarter. He also provided support to the development of the Engineering Forum Issue Paper (Energy Conservation/Production at Waste Sites) through the use of a Region 10 visiting research scholar.

For more information about the HSTLs. contact Connie Bosma at 202-564-6773 or bosma.connie@epa.gov.

#### **OSP Quarterly Contributing Writers**

- Connie Bosma
- Lorelei Kowalski
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- Jeff Morris
- Kathleen Graham
   Ruth Partridge
- Anthony Grimm
- Greg Susanke
- Megan Grogard
- Brenda Washington
- Heather Harris
- Randy Wentsel

David Klauder

Paul Zielinski

For more information on the OSP Quarterly, contact Sarah Bauer at 202-564-3267 or bauer.sarah@epa.gov.





## NEJAC Health and Research Subcommittee Meeting

In its role of providing oversight and overall management of ORD's Environmental Justice Program, OSP co-sponsored with OPPTS and the Office of Environmental Justice, a meeting of the Health and Research Subcommittee of the National Environmental Justice Advisory Council (NEJAC) on December 11,2002.

Key discussion topics included the Contaminated Sediments Science Plan that represents the first example of an Agency plan on a specific cross-Agency Office and Regional-wide activity. The Subcommittee is reviewing the document with special emphasis on

the Risk Communication and Community Involvement section and will provide recommendations by mid-January to the Agency's Contaminated Sediments Workgroup.

In addition, Region 2 shared data collected in response to concerns of Subcommittee members on the impacts of the "9-11 tragedy" on surrounding communities, particularly "at-risk" (e.g., low-income, minority, and tribal) communities, and what steps have been taken to address community needs.

For more information on this meeting, please contact Sam Williams at 202-564-6782 or williams.sam@epa.gov.

## Series October 16, 2002—Children

**October 16, 2002**—Children's Total Exposure to Pesticides and Other Persistent Pollutants (CTEPP): An Overview

**ORD/OPPTS Seminar** 

Author: Marsha Morgan, Ph.D., National Exposure Research Laboratory (NERL)

Young children may have greater exposures to pollutants in their everyday environments than do adults. Because of their immaturity, rapid development, and smaller body masses, children also may be more susceptible to the effects of these pollutants. Recent federal health initiatives promote research to fill in data gaps on young children's exposures. The Food Quality Protection Act (FQPA) specifically requires children's exposure assessments, including aggregate exposures from all sources, and prescribes additional protective assumptions in estimating children's exposures. CTEPP's two major objectives are to: (1) measure the total (aggregate) exposures of a small set of children, ages 18 months to 5 years, and their primary caregivers in selected North Carolina and Ohio counties, to a suite of persistent pesticides and other persistent organic pollutants (POPs) in their everyday environments; and (2) apportion the exposure pathways and identify hypotheses to be tested in future research. Several hypotheses will be tested, and a comprehensive database is being developed.

The PowerPoint slides of this presentation can be viewed on the following EPA intranet site: http://intranet.ord.epa.gov: 9876/development/RCT/PestToxRCT.nsf/

#### Seminar Series continued on p. 6

OERR	Remediation
Oil Spill	Risk
ORMA	RSL
OSWER	Science Forum
Partnerships	Stewardship
PBPK Model	Tribal

PCB Congeners Underground Storage Tank
Pharmacokinetics Waste RCT

Presumptive Remedies Water Quality
Prevention Watershed Management

#### **Word Find**

В	N	Α	K	N	Α	Т	Е	G	Α	R	0	Т	S	D	N	U	0	R	G	R	Е	D	N	U	S
Т	0	C	R	0	P	N	R	В	Р	Α	N	0	1	S	U	F	F	-1	D	N	Υ	C	S	1	L
S	1	Т	Е	Т	В	R	S	R	N	R	Т	S	L	L	Υ	G	R	Е	N	Ε	Т	Е	Т	Α	N
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G	R	0	-1	1	0	W	Α	U	Е	В	Е	S	S	C	N	1	R	М	Q	0	C	М	R	0	R
N	Е	-1	Α	F	D	R	S	R	С	G	U	Ν	L	0	R	R	E	Υ	S	Т	Е	Е	D	P	Е
1	S	Т	Т	D	Е	P	Q	0	S	N	R	E	1	N	R	R	Н	Т	Т	C	S	G	S	S	N
R	N	Е	-1	N	L	U	M	F	D	1	F	Т	0	K	Е	Q	W	-1	0	Α	D	Α	Н	N	Е
0	0	N	0	Α	P	P	Q	Е	Α	L	N	1	Α	V	0	L	С	N	R	Ε	N	N	1	Α	R
Т	C	Α	N	L	L	P	Α	С	Т	Е	Α	M	1	0	P	C	0	U	М	R	Α	Α	P	R	Т
1	J	R	-1	1	Α	Q	K	N	V	D	R	Т	М	L	Н	C	Α	M	1	0	L	М	В	T	S
N	U	Т	Α	Х	L	S	Т	Е	M	0	P	S	Т	Α	Α	0	D	M	Т	1	Е	P	1	D	S
0	Υ	N	J	Α	-1	P	R	1	Т	М	D	L	Е	-1	F	N	W	0	R	В	M	Е	0	N	T
М	С	-1	В	R	0	P	Α	С	U	Н	0	M	Е	L	Α	S	X	С	E	Α	0	н	R	Α	R
Ε	W	-1	M	Т	В	W	Α	S	Т	Е	R	С	Т	N	1	Е	L	Е	М	0	н	S	Α	Е	F
Ε	R	U	S	0	P	Χ	Е	н	S	Т	S	P	1	н	S	R	Е	N	Т	R	Α	Р	С	Т	a
Т	В	-1	R	1	М	R	Т	N	Е	М	Е	G	Α	N	Α	М	D	Е	Н	S	R	Е	Т	Α	W
М	0	Т	M	D	P	С	В	С	0	N	G	Е	N	Е	R	S	Т	M	D	S	U	R	0	F	Α
G	P	R	M	Е	С	-1	Т	S	U	J	L	Α	Т	N	Е	M	N	0	R	1	V	N	Е	Q	S

Bioreactor Brownfield Compliance Conservation CTEPP
Diffusion
Energy
Environmental Justice

Exposure Fate and Transport FQPA GPRA Homeland Security HSTL Intranet IRIS Landfill Modeling Monitoring MTBE

## STAFF CORNER

EPA/600/N-02/005B February 2003

#### **ORD/OPPTS Seminar Series**

(Continued from p. 5)

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**October 30, 2002**—Chemical Identification and Fate Research Relative to Pesticide and Toxic Chemical Risk Assessments

Authors: Tim Collette, Ph.D. (presenter), and Eric J. Weber, Ph.D., NERL

Elucidating and modeling organic chemical behavior in water and soil/water systems are

major functions of the ORD/NERL/Ecosystems Research Division in Athens, GA. Research has been conducted that has led (or is leading) to an understanding of important chemical fate processes such as hydrolysis, sorption, biodegradation, and redox reactions. This enables prediction of the fate of pollutants in the environment. Accurate tools (e.g., the SPARC computer program) for determining physicochemical properties and speciation behavior of organic chemicals also have been developed. The overall goal of this work is to build quantitative computer models that allow accurate assessment of human and ecosystem exposure to organic chemicals. The presentation focused on capabilities and efforts in these fields of research, and on the positive impact that this type of work can have on pesticide and toxic chemical risk assessments. In addition, FQPA drinking water assessments, and new research directions and tools were discussed. The PowerPoint slides can be viewed at: http://intranet.ord.epa.gov:9876/development/RCT/PestToxRCT.nsf/1d97341def1e57d185256a5c006ee7121be25031c8d5ce0085256c5c005fdfaf?Open Document.

Contact Greg Susanke at 202-564-9945 or susanke.greg@epa.gov for more information.

### (November thru February '03)

#### Welcome to Our New Folks

Tanya Tharps joined the Administration and Special Projects Team on November 12th. She provides administrative support to OSP in the human resources area. Tanya initially served a 120-day detail with OSP and comes to us from our sister office, ORMA, where she provided administrative support for 10 years.

Theresa (Terry) Simpson joined the Program Support Staff on October 15th. She is working on several program support activities, including implmentation of EPA's Information Quality Guidelines. Terry is an Environmental Scientist and comes to us from the Inspector General's Office. Prior to that position, she worked in OSWER and in Region 3.

Sharon Ogunfiditimi, SEE employee, joined the Immediate Office on December 2nd.

She provides administrative support to OSP. Sharon most recently worked as a teacher of therapeutic art activities to individuals and groups, especially those who are physically and mentally challenged. Previously, Sharon spent many years working for the District of Columbia and the Washington Metropolitan Area Transit Authority as a contracts specialists, procurement agent, and program manager.

#### **A-TEAM Bulletin Board**

The Administrative Team or "A-Team" was very busy this quarter with the close-out of FY '02 and starting the new FY '03! Some items of note include:

